

REMARKS

Claims 7-13 and 21-26 are pending in the current application. Claims 7 and 21 are currently amended. Claims 14-20 are canceled herein. Claims 1-6 were previously canceled.

The U.S. Patent and Trademark Office (USPTO) indicates that claims 7-13 and 21-26 would be allowable if rewritten or amended to overcome the rejections under 35 U.S.C. § 112, second paragraph.

Applicants respectfully request reconsideration of the application in view of the foregoing amendments and the remarks appearing below which Applicants believe place the application in condition for allowance.

Objection to Claims

Claim 7 stands objected to because the word “addressed” appears when the word should be “addresses.” Applicants have amended claim 7 to change the word “addressed” to “addresses.” Therefore, Applicants respectfully request withdrawal of the present objection.

Rejections under 35 U.S.C. 112, Second Paragraph

Claims 7-13 and 21-26 stand rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter Applicants regard as their invention.

Antecedent Basis

The USPTO asserts that the limitation “failed row and column addresses” in claim 7, line 11, has insufficient antecedent basis.

As seen in the Status of the Claims section above, Applicants have amended claim 7 so as to remove the limitation “failed row and column addresses.” Applicants note they have made several other amendments to claim 7 to address the clarity of this claim.

The USPTO asserts that the limitations “to-be-repaired row addresses” and “to-be-repaired column addresses” of claim 21, lines 13-14, have insufficient antecedent basis.

As seen in the Status of the Claims section above, Applicants have amended claim 21 so as to provide proper antecedent basis for “to-be-repaired row addresses” and “to-be-repaired column addresses.” Applicants note they have made several other amendments to claim 21 to address the clarity of this claim.

Clarity

The USPTO asserts it is not clear as to when or how the first and second memory elements are being loaded, as per claims 7 and 21. In particular, the USPTO states:

For instance, the first and second memory elements are empty when the[re] are no errors in the memory circuit. In that case, the third memory element would be the only memory element with address data and the determining steps would not provide accurate results.

Office Action, page 3, section 5.d. Applicants respectfully point out that this is not how their system works. Each of the first, second and third memory elements contain row and/or column addresses of defective memory locations. Therefore, there would never be the case where there are no defective memory locations AND row and column address data in the third memory element. There are only row and column address data in the third memory element when the BIST has identified failing memory locations.

Applicants believe the USPTO's concern may be due to the phrasing of independent claims 7 and 21 as they stood prior to the current amendments. That is, Applicants suspect that the USPTO may be reading the old phrasing as including all of the row and column addresses of the embedded memory, rather than just row and column addresses of failed memory locations. As seen in the Status of the Claims section above, however, Applicants have amended claims 7 and 12 to make clear that the third memory element contains row and column address data of failed memory locations.

For at least the above reasons, Applicants believe that independent claims 7 and 21 as currently amended overcome the present rejections. Therefore, Applicants respectfully request withdrawal of the present rejection of these claims and claims 8-13 and 22-26 that depend therefrom.

Rejections under 35 U.S.C. §103

Irrinki et al./Park et al.

Claims 14 and 16-20 stand rejected under 35 U.S.C. §103(a) as being obvious in view of a combination of U.S. Patent No. 5,987,632 to Irrinki et al. and U.S. Patent No. 6,574,757 to Park et al.

Applicants have canceled claims 14 and 16-20. Therefore, the present rejection is moot, and Applicants respectfully request its withdrawal. Applicants note, however, that they are not representing that the canceled claims are unpatentable, nor that the USPTO's position regarding

the rejection is correct, and reserve the right to pursue the canceled claims in a continuation application.

Irrinki et al./Park et al./Ohtani et al.

Claim 15 stands rejected under 35 U.S.C. §103(a) as being obvious in view of a combination of the Irrinki et al. and Park et al. patents, discussed above, and further in view of U.S. Patent Application Publication 2002/0196683 to Ohtani et al.

Applicants have canceled claim 15. Therefore, the present rejection is moot, and Applicants respectfully request its withdrawal. Applicants note, however, that they are not representing that the canceled claim is unpatentable, nor that the USPTO's position regarding the rejection is correct, and reserve the right to pursue the canceled claim in a continuation application.

CONCLUSION

In view of the foregoing, Applicants respectfully submit that claims 7-13 and 21-26, as amended, are in condition for allowance. If any issues remain, the Examiner is encouraged to call the undersigned attorney at the number listed below.

Respectfully submitted,

INTERNATIONAL BUSINESS MACHINES CORP.

By: 

Morgan S. Heller II
Registration No. 44,756

DOWNES RACHLIN MARTIN PLLC
Tel: (802) 863-2375
Attorneys for Assignee